



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Northern Virginia Regional Office
13901 Crown Court
Woodbridge, VA 22193-1453
(703) 583-3800 fax (703) 583-3801
www.deq.virginia.gov

STATE AIR POLLUTION CONTROL BOARD ENFORCEMENT ACTION ORDER BY CONSENT ISSUED TO

Motiva Enterprises, LLC
DEQ Registration No. 70248

SECTION A: Purpose

This is a Consent Order issued under the authority of Va. Code § 10.1-1307.D, 10.1-1316, and 10.1-1309, between the State Air Pollution Control Board (SAPCB) and Motiva Enterprises, LLC (Motiva), for the purpose of resolving certain alleged violations of the air permits and regulations as specified in SECTION C of this Order.

SECTION B: Definitions

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned to them below:

"Va. Code" means the Code of Virginia (1950), as amended.

2. "Board" means the State Air Pollution Control Board, a permanent collegial body of the Commonwealth of Virginia as described in Code §§ 10.1-1301 and 10.1-1184.
3. "Continuous Emission Monitoring System" or "CEMS" means the equipment required to sample, analyze, measure, and provide, by means of readings recorded at least every 15 minutes (using an automated data acquisition and handling system (DAHS)), a permanent record of VOC emissions from the VRU. CEMS does not include installed spare or standby equipment that is not online and actively functioning in the collection and recording of real-time operating data.

4. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia as described in Va. Code § 10.1-1183.
5. "Director" means the Director of the Department of Environmental Quality.
6. "Facility" means Motiva Enterprises LLC's Fairfax Terminal, located at 3800 Pickett Road, Fairfax City, Virginia 22031 (Fairfax City).

"Motiva" means Motiva Enterprises, LLC.
8. "NVRO" means the Northern Virginia Regional Office of DEQ, located in Woodbridge, Virginia.
9. "O&M" means operations and maintenance.
10. "Order" means this document, also known as a Consent Order and Appendix A
11. "Regulations" refers to the Regulations for the Control and Abatement of Air Pollution for the Commonwealth of Virginia.
12. "SAPCB Regulations" mean the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution.
13. "VAC" means Virginia Administrative Code.
14. "VOC" means Volatile Organic Compound, a precursor of the criteria pollutant ozone.
15. "VRU" means the vapor recovery units utilized by Motiva Enterprises as emission control devices.

SECTION C: Findings of Fact

1. Motiva operates a petroleum liquids storage and distribution terminal located at 3800 Pickett Road in Fairfax, Virginia. Motiva is subject to 9 VAC 5 Chapter 40, Article 37 of the SAPCB Regulations for the Control and Abatement of Air Pollution (*Emission Standards for Petroleum Storage and Transfer Operations*), and 40 CFR 60.500 through 40 CFR 60.506 (*Standards of Performance for Bulk Gasoline Terminals*). A Title V Stationary Source Operating Permit was issued to this facility on April 14, 2000.

2. On October 12, 2004, Virginia Department of Environmental Quality (DEQ) staff conducted an inspection of Motiva's Fairfax Bulk Terminal (Facility Registration No. 70248) to determine the facility's compliance with the applicable SAPCB Regulations, and the aforementioned Title V Permit. That inspection revealed the following recordkeeping deficiencies:
 - a. Data were not available for the average monthly storage temperature and the true vapor pressure of the liquid stored in each tank (in accordance with permit Condition II.E.1.c.2 and SAPCB Regulation 9 VAC 5-40-5220.A.4.c);
 - b. Data were not available to indicate that the facility had performed the required annual certification of its Continuous Emission Monitoring (CEM) device since May 15, 2003 (in accordance with permit Condition II.E.2.c.2);
 - c. Data were not available to indicate that annual tank inspections were performed (in accordance with permit Condition II.E.1.b.1); and
 - d. Data were not available to indicate that system leaks were being logged and tracked through to repair (in accordance with permit Condition II.E.2.d.1).
3. Motiva's *Title V Semi-Annual Monitoring Report (01/01/2004-06/30/2004)* and *Failure/Malfunction Report*, submitted on August 19, 2004, and reviewed on October 29, 2004, reported that the CEMS recording system appeared to have been inaccurately calculating the one-hour and six-hour rolling averages prior to June 17, 2004. Motiva noted that it was possible that there were emission exceedences during the period of January 1, 2004, through June 16. Although it was stated that the instantaneous one-minute data were not impacted, Motiva did not at that time provide recalculated data as evidence of emission rates.
4. In an October 27, 2004, *Informal Correction Letter (ICL)*, DEQ requested that Motiva more precisely define the period of the data miscalculations, and that it use the instantaneous one-minute data to recalculate the six-hour rolling volatile organic compound (VOC) emissions, as well as provide data that were unavailable during the October 12, 2004, inspection.
5. On November 29, 2004, DEQ received Motiva's November 22, 2004, *Informal Correction Letter Response*. In that response, Motiva provided the following:
 - a. Tank vapor pressure and storage temperature data
 - b. Annual tank inspection data;

- c. Daily and weekly terminal inspection checklists;
- d. Vapor recovery unit (VRU) checklist;
- e. Hard copy CEM data for Unit for June 30, 2004; and
- f. A data disk intended to provide the instantaneous one-minute CEM data for the period from January 1, 2004, through June 30, 2004.

A subsequent request was made for the emissions data while DEQ was at the facility to observe a stack test of the new VRU on December 20, 2004, after it was noted that the files on the data disk could not be accessed.

6. DEQ and Motiva held a meeting at the Northern Virginia Regional Office on January 28, 2005, to discuss currently unresolved compliance issues and DEQ's findings to date, and to develop a schedule for resolution. DEQ requested that Motiva provide: a) the tank vapor pressure and temperature data in the format required by the facility's permit; b) the required chamber temperature monitoring data for the portable vapor combustion unit (PVCU); c) VOC emissions exceedance data back to May 2003; and d) evidence that a Relative Accuracy Test Audit (RATA) was performed in December 2004. Motiva provided a data disk that included the recalculated six-hour rolling average emissions for the period from January 1, 2004, through June 30, 2004.
7. On February 2, 2005, DEQ received a verbal notification from Motiva that, during the Annual Title V Certification document review process, Motiva found an annual inspection report of the internal floating roof (IFR) of Tank #30803 conducted on December 17, 2004 which noted a problem with the secondary wiper seal. Motiva conducted a follow-up inspection of Tank #30803 on February 2, 2005, to validate the condition of the secondary seal, and reported, in the verbal notification to DEQ, that the secondary seal appeared to be torn and showed signs of wear. In a follow-up written notification letter dated February 18, 2005, Motiva stated that it intended to repair/replace the seal during the tank's scheduled API 653 inspection in March 2005. DEQ noted that Motiva had failed to initiate necessary repairs in accordance with the time frame specified by Condition II.E.1.b.1 of their Title V permit.
8. On March 1, 2005, DEQ received Motiva's *Addendum to the Title V Semi-Annual Monitoring Report (01/01/2004-06/30/2004)*, providing the details of noted periods of exceedances of the VOC emission limit for the period from January 1, 2004, through June 30, 2004. The Addendum report indicated that there were 376 hours and 37 hours of exceedances for CEM Unit #1 and CEM Unit #2, respectively, during that reporting period. Motiva also provided its plan for improving O&M of the CEMS to ensure that future malfunctions or deviations are minimized, and that those that occur are noted, quantified, and reported more promptly.

9. On March 18, 2005, DEQ received a data disk from Motiva that provided the recalculated VOC emissions data for the period from June 1, 2003, through June 17, 2004. These were the instantaneous one-minute data, calculated on a six-hour rolling average. There were innumerable emission exceedences due to the overwhelming number of one-minute data points in the one-year period. Motiva reported that the CEM data for May 17 through May 31, 2003 was missing. Additionally, Motiva submitted the requested tank vapor pressure and temperature data and PVCU combustion chamber temperature strip chart.
10. DEQ and Motiva held a meeting at the Northern Virginia Regional Office on March 30, 2005, to discuss DEQ's preliminary findings and to allow Motiva to provide additional data they wished to have considered. Motiva provided a detailed reiteration of the facts of the CEM data miscalculation problem, explaining that, while the one-minute instantaneous data provided showed minimum and maximum emission rates, they use the maximums for their calculations (per the manufacturer's recommendation). Motiva noted that it believes a significant portion of the data reporting problems associated with CEM Unit #1 were because the analyzer was out of range and therefore not reading correctly.
11. On March 18, 2005, DEQ received a data disk from Motiva that provided the recalculated VOC emissions data for the period from June 1, 2003, through June 17, 2004. DEQ distilled the six-hour rolling average data (reported in one-minute increments) to call out hourly (i.e., those that occurred on the hour) exceedences of the emission limit using the calculated six-hour rolling average. DEQ identified a total of 1,150 hourly exceedences (on 146 days) of the 10mg/l limit. In accordance with permit Condition II.E.2.a.4., total organic compound (TOC) emissions from the VRU shall not exceed 10 milligrams per liter (mg/l) of gasoline loaded.
12. On April 12, 2005, DEQ received a letter from Motiva which included a data disk containing recalculated VOC emissions data for the previously missing period from May 15, 2003 through May 31, 2003. In addition, data files for the period of June 1, 2003 to June 2, 2003 were included for CEM Unit #2. The notification letter went on to state that upon review of the re-calculated 6-hour rolling average data, Motiva determined that the VRU operated within permit limits during the above-specified periods.
13. DEQ and Motiva held a meeting at the Northern Virginia Regional Office on May 25, 2005, to discuss the alleged violations and to allow Motiva to provide additional data they wished to have considered. At that time, Motiva asserted that it had provided the requested tank vapor pressure and temperature data in November 2004, but that it was not in the format required by the facility's permit. Motiva did not dispute any of DEQ's other findings.
14. DEQ issued an NOV (dated May 26, 2005) to Motiva on May 27, 2005, addressing the alleged recordkeeping deficiencies and alleged emission limit exceedences as well

as incorporating comments Motiva provided during the May 25, 2005 meeting and in its letter dated May 24, 2005. The allegations contained in the NOV were as follows:

- a. Failure to maintain a record of the throughput of each tank, to include the average monthly storage temperature and the true vapor pressure of the liquid stored in each tank, as specified in permit Condition II.E.1.c.2 and SAPCB Regulation 9 VAC 5-40-5220.A.4.c.
 - b. Failure to perform required annual Relative Accuracy Test Audit (RATA) within the prescribed timeframe defined by 40 CFR (Code of Federal Regulations) Part 60, Appendix F.
 - c. Failure to properly maintain the facility's emission control system, resulting in 1,150 hourly exceedences of the 10 mg/l VOC emission limit from June 2003 through June 2004.
 - d. Failure to initiate necessary repairs to a secondary seal in an internal floating roof tank in accordance with the time-frame specified by Condition II.E.1.b.1 of their Title V permit.
15. In drafting this Consent Order, DEQ tempered the volume and severity of the reported VOC emission exceedences with the understanding (based on its review of the graphic CEM data) that at least some of the exceedences may actually be anomalies in the CEM data.

SECTION D: Agreement and Order

Accordingly, by virtue of the authority granted it in Va. Code §10.1-1316(C), the Board orders Motiva, and Motiva agrees to perform the actions described in Appendix A and Appendix B of this Order. In addition, the Board orders Motiva, and Motiva voluntarily agrees, to pay a civil charge in the amount of fifty-five thousand three hundred and seventy-six dollars (\$55,376.00). Motiva is authorized to utilize up to forty-one thousand five hundred dollars (\$41,500.00) of this civil charge in the completion of the Supplemental Environmental Project (SEP) as described in Appendix B. Therefore, the civil charge amount payable to the Treasurer of Virginia shall be the difference between the total civil charge (\$55,376.00) and the amount utilized to complete the SEP. The civil charge is due within 30 days of the DEQ accepted date of completion of the SEP but no later than 60 days from of the effective date of the Order unless DEQ grants an extension. Payment shall be made by check payable to the "Treasurer of Virginia", delivered to:

Receipts Control
Department of Environmental Quality
Post Office Box 10150
Richmond, Virginia 23240

SECTION E: Administrative Provisions

The Board may modify, rewrite, or amend the Order with the consent of Motiva, for good cause shown by Motiva, or on its own motion after notice and opportunity to be heard.

2. This Order only addresses and resolves those violations specifically identified herein, including those matters addressed in the Notice of Violation issued May 26, 2005. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent remediation of the facility as may be authorized by law; or (3) taking subsequent action to enforce the Order. This Order shall not preclude appropriate enforcement actions by other federal, state, or local regulatory authorities for matters not addressed herein.
3. For purposes of this Order and subsequent actions with respect to this Order, Motiva admits the jurisdictional allegations, factual findings, and conclusions of law contained herein.
4. Motiva consents to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order.
5. Motiva declares it has received fair and due process under the Administrative Process Act, Va. Code §§ 9-6.14:1 *et seq.*, and the State Air Pollution Control Law and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to any judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board to enforce this Order.
6. Failure by Motiva to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.
7. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
8. Motiva shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other occurrence. Motiva shall show that such

circumstances were beyond its control and not due to a lack of good faith or diligence on its part. Motiva shall notify the DEQ Regional Director in writing when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of the Order. Such notice shall set forth:

- a. the reasons for the delay or noncompliance;
- b. the projected duration of any such delay or noncompliance;
- c. the measures taken and to be taken to prevent or minimize such delay or noncompliance; and
- d. the timetable by which such measures will be implemented and the date full compliance will be achieved.

Failure to so notify the Regional Director within 24 hours of learning of any condition above, which the parties intend to assert will result or has resulted in the impossibility of compliance, shall constitute a waiver of any claim of inability to comply with a requirement of this Order.

9. This Order is binding on the parties hereto, their successors in interest, designees and assigns, jointly and severally.
10. This Order shall become effective upon execution by both the Director or his designee and Motiva. Notwithstanding the foregoing, Motiva agrees to be bound by any compliance date that precedes the effective date of this Order.
11. This Order shall continue in effect until the Director or Board terminates the Order in his or its sole discretion upon 30 days written notice to Motiva. Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve Motiva from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.

12. By its signature below, Motiva voluntarily agrees to the issuance of this Order.

And it is so ORDERED this day of April 6, 2006


David R. Taylor, Director
Department of Environmental Quality

Motiva voluntarily agrees to the issuance of this Order.

By: Susan M. Horning
Date: 4-4-06

Commonwealth of Virginia

City/County of FAIRFAX

The foregoing document was signed and acknowledged before me this day of

APRIL 4th, 2006, by SUSAN M. HORNING, who is
(name)

TERMINAL MGR. of Motiva, on behalf of the Corporation.
(title)

Nitin Saini
Notary Public

My commission expires: 01/31/2010.

APPENDIX A

As part of the resolution of this Consent Order, Motiva shall.

1. Submit a detailed description of the processes and procedures implemented to address the following actions (#2 – #8 below) within 30 days of the date of execution of this Consent Order.
2. Calibrate, maintain and operate each installed CEMS for continuously monitoring and recording VOC emissions from the vapor recovery unit (VRU), except for system breakdowns, repairs, calibration checks and zero and span adjustments required under subdivision B2 of 9 VAC 5-40-41. Unless otherwise approved by DEQ, each CEMS shall be installed, calibrated, maintained and operated in accordance with the applicable requirements of 9 VAC 5-40-40 and 9 VAC 5-40-41.
3. Ensure that each installed CEMS shall be configured to compute one-hour averages from four or more data points spaced at approximately equal intervals over each one-hour period. Data recorded during periods of system breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages computed in this condition. An arithmetic or integrated average of all data may be used. The data output of each CEMS may be recorded in reduced or non-reduced form (e.g., percent propane). All excess emissions should be converted into units of the standard (e.g., mg/l). After conversion into units of the standard, the data shall be rounded to the same number of significant digits used to specify the applicable standard (e.g., 10.36 mg/l rounded to 10.4 mg/l for a 10.0 mg/l standard).
4. Check the zero and span drift of each installed CEMS at least once daily in accordance with the minimum procedures specified in 9 VAC 5-40-41.B.2 and the method prescribed by the manufacturer unless the manufacturer recommends adjustments at shorter intervals, in which case such recommendations shall be followed. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour calibration drift limits of the applicable performance specifications in Appendix B of 40 CFR 60 are exceeded.
5. Ensure that each installed CEMS is audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows:
 - a. Relative Accuracy Test Audit (RATA). The RATA must be conducted at least once every four calendar quarters. Conduct the RATA as described for the RA test procedure in the applicable Performance Specification (PS) in 40 CFR Part 60, Appendix B (e.g., PS 8 for Volatile Organic Compounds). Motiva shall submit a RATA test protocol to the Air Compliance Manager (ACM), DEQ at least 30 days prior to performing

the tests. Motiva shall submit reports of the RATA test results to the ACM, DEQ within 60 days of test completion.

- b. Cylinder Gas Audit (CGA). A CGA may be conducted in all calendar quarters except when a RATA is being conducted. The CGA shall be conducted in accordance with the requirements of 40 CFR Part 60, Appendix F, §5.1.2. CGA results shall be submitted to the ACM, DEQ along with Motiva's quarterly EER submissions (Reference No. 6 below).
 - c. Each CEMS tested must be below the criteria for excessive audit inaccuracy. The criteria for excessive audit inaccuracy are defined in 40 CFR Part 60, Appendix F, §5.2.3 and the applicable Performance Specification (e.g., PS 8 for Volatile Organic Compounds).
6. Submit a written report of excess emissions and either a monitoring systems performance report or a summary report form, or both, to the ACM, DEQ quarterly. The summary report and form shall meet the requirements of 40 CFR §60.7 (d). All reports shall be postmarked by the 30th day following the end of each calendar quarter. The written reports of excess emissions shall include the information specified in 9 VAC 5-40-50.C.1.
7. Take the following measures in order to minimize the duration and frequency of excess emissions, with no respect to the VRU and CEMS as well as process equipment which affect such emissions:
- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance;
 - b. Maintain an inventory of spare parts;
 - c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum;
 - d. Train operators in the proper operation of all such equipment and familiarize the operators of the training provided including the names of trainees, the date of training and the nature of the training; and
 - e. Maintain records of maintenance and training on site for a period of five years and shall be made available to DEQ personnel upon request.

8. Continue to perform manual CEMS data reviews minimally once every two weeks to confirm data quality. This requirement shall terminate 90 days after execution of the Consent Order, provided Motiva's records indicate that CEMS data collection problems have been resolved.

Action items 2 through 7 are State and Federal regulatory requirements that are to be incorporated into Motiva's next Title V Permit.

APPENDIX B

Supplemental Environmental Project

In addition to the foregoing, the Virginia State Air Pollution Control Board orders Motiva to undertake, and Motiva agrees to implement, a Supplemental Environmental Project (SEP) in accordance with the following terms and conditions:

- 1 The SEP to be funded by Motiva is the purchase and permanent retirement of allowances under the NOx Budget Trading Program. The number of allowances to be retired is to be commensurate with the amount of NOx reduced during the ozone season from the purchase of wind power by Arlington and Fairfax Counties in the calendar years 2005 and 2006. The purchase and retirement of these allowances will make federally enforceable (for state implementation plan purposes) the reductions achieved by these counties through the use of a clean, renewable energy source.
2. Motiva shall purchase NOx Budget Trading program allowances and deposit these allowances into the Virginia Public Health Retirement Account, Account Number VA0000000300. Motiva should attempt to balance the purchase of NOx Budget Trading program allowances for calendar year 2005 and 2006.

Motiva's financial obligation under this SEP shall not exceed \$41,500. Allowable expenses under this SEP for Motiva include the actual purchase price of NOx allowances purchased and retired and the cost of an appropriate broker that may assist Motiva with the completion of this SEP. The maximum allowable brokerage fee that Motiva may apply as a SEP expense is \$2,000. A list of brokers acceptable to DEQ is listed on the Environmental Protection Agency's Clean Air Markets Division website (<http://www.epa.gov/airmarkets/trading/buying.html>). Motiva shall submit a financial accounting of the money utilized in the completion of this SEP to DEQ.

Motiva is directed to utilize as much of the allowable budget for this SEP as practical. Should the purchase price of these allowances plus any reasonable brokerage fee total less than \$41,500, Motiva shall remit the difference between the purchase price plus any reasonable brokerage fee and \$41,500 to DEQ in accordance with the terms of Section D of the foregoing Consent Order.

3. **Motiva's obligation for this project shall terminate once Motiva has notified DEQ in writing and DEQ has verified electronically that the Virginia Public Health Retirement Account, Account Number VA0000000300, has been credited with the appropriate allowance totals, as listed in #2 above. Motiva shall take reasonable measures to expedite crediting these allowances to the Virginia Public Health Retirement Account and shall send written notification to the Director, VDEQ Northern Virginia Regional Office (NVRO) that the credits have been transferred. If the allowances cannot be credited within 60 days from the effective date of this**

Consent Order, Motiva will provide written notification to VDEQ NVRO explaining the delay and projecting a schedule to complete the transaction.

4. In the event that Motiva publicizes the SEP or the results of the SEP, Motiva shall state in a prominent manner that the project is part of a settlement for an enforcement action with DEQ.